



Breast Cancer in North Carolina

A Handbook
for Health Care Providers

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The North Carolina Comprehensive Breast and Cervical Cancer Control Coalition



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CHAPTER

1

Breast Cancer in North Carolina

Breast cancer is the second leading cause of cancer deaths among women in North Carolina. There will be a projected 4,580 new breast cancer cases among women in North Carolina during 1995. Although the survival rate for early stage breast cancer is very high, a large portion of women in North Carolina who develop breast cancer will not discover it until it has progressed to a later stage.

Who is at Risk?

Women have a 92% chance of surviving breast cancer when it is detected early. Despite this fact, breast cancer is the second leading cause of cancer deaths for women in North Carolina.

Women over age 50, women who are of low socioeconomic status, women who have low formal educational levels, and women of color are at particular risk for later stage breast cancer at diagnosis and have lower overall survival rates.

Poverty and Race in North Carolina

- Approximately 14% of the state population lives in poverty.
- North Carolina is one of only seven states where African Americans constitute more than 20% of the population.
- North Carolina has the fifth largest Native American population.

In our multicultural society, developing, having, and losing breasts is an emotional and sexual issue. Many women associate their breasts with womanhood, attractiveness, and self-esteem. Breast health is often seen as a separate health issue rather than part of total health care.

Breast cancer is the most common type of cancer in women and is the second leading cause of cancer-related death. In 1994, The American Cancer Society (ACS) estimated 183,000 new cases of breast cancer and 46,300 breast cancer-related deaths in the United States. Approximately one out of eight women in the United States who lives to be 85 years old or older will develop breast cancer during her lifetime (American Cancer Society, 1995).

Incidence There will be a projected 4,600 new cases among women in North Carolina during 1995. Incidence rates in North Carolina are slightly higher than national rates. National rates are increasing.

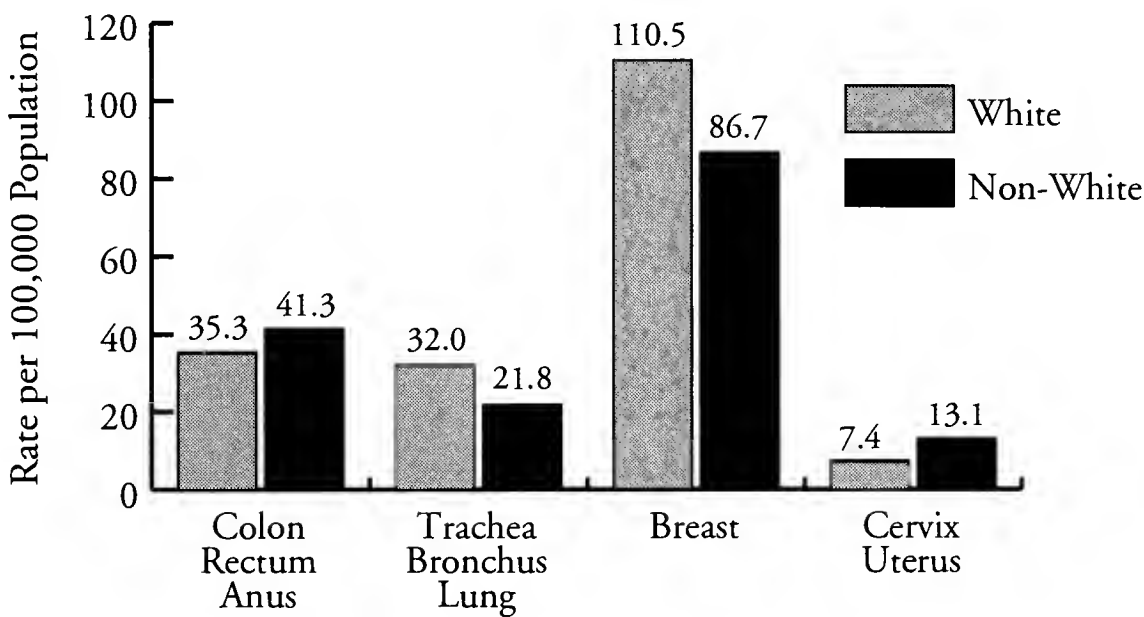
Age and Breast Cancer

- Age is the primary risk factor for developing breast cancer.
- More than 78% of breast cancer cases occur in women older than age 50.

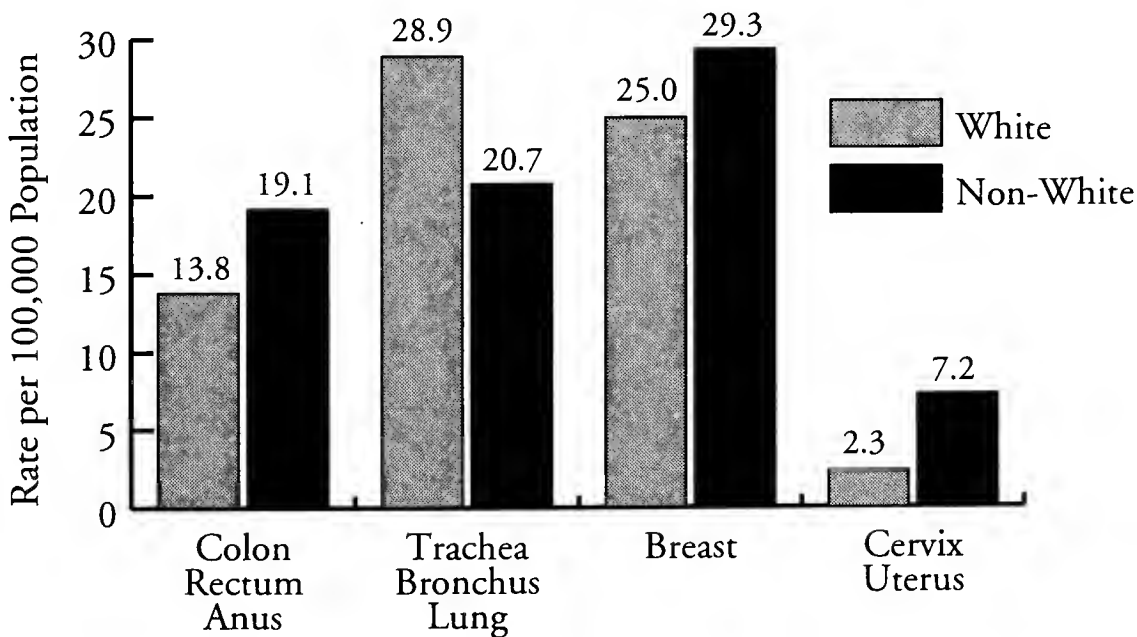
Mortality An estimated 1,170 deaths will occur in North Carolina in 1995 from breast cancer.

Survival The 5 year survival rate for localized breast cancer has risen from 78% in the 1940's to 92% today. If the breast cancer is in situ, the survival rate approaches 100%. If the cancer has spread regionally, however, the survival rate is 71%. For persons with distant metastases, the survival rate is 18%.

Incidence of Breast Cancer in North Carolina Compared to Other Leading Cancers in Women, 1991



Mortality from Breast Cancer in North Carolina Compared to Other Leading Cancers in Women, 1988–1992



Source: North Carolina Central Cancer Registry.

In North Carolina, early breast cancer detection fits a geographical pattern. More breast cancers are detected at early stages in the Central Piedmont area, followed by the Mountain region, with the Coastal Plain having the lowest rate of early diagnosis. Screening rates in North Carolina are consistent with those of the nation. However, mortality rates are elevated. Late diagnoses among rural and low income residents is suspected of contributing to this pattern. Therefore, greater emphasis on early detection among low income and rural women in North Carolina is needed.

Screening Practices

Older women and women with lower incomes have lower breast cancer screening rates. In general, the most significant barriers are health care providers not recommending screening and women not regarding the test as necessary. Perhaps most important, the lack of screening remains a lost clinical opportunity. **Most women who have not been screened have had recent contact with the health care system, but they have failed to receive or have not been referred for screening.**

Data from the 1990 Disease Prevention and Health Promotion Supplement (DPHPS) to the National Health Interview Survey (NHIS) show that progress is being made in mammography. About 58% of U.S. women overall now report ever having had mammograms. This summary feature, however, greatly oversimplifies the facts. An analysis by Rakowski et al. (1993) found that only about 29% of women aged 40–75 both had been screened on the recommended age-specific schedule and had expressed an intention to continue screening. Another 29% indicated no intention to have a mammogram in the near future. The 1992 Behavioral Risk Factor Surveillance Survey (BRFSS) revealed that the proportion of women who obtained a mammogram in the previous year ranged from 34.4% to 60.2% (median 45.1%), and a clinical breast examination from 37.6% to 72.9% (median 56.9%). Overall, 39.8% of the women reported having a mammogram within the past year.

Screening Facts

- In 1992, only 72.2% of women 40 or older in North Carolina reported ever having had a mammogram.
- In North Carolina, only 49% of African American women 50 or older and 59% of white women 50 or older have had a screening mammogram in the last 2 years.
- An estimated \$60,000 to \$70,000 in medical costs will be saved for every woman whose breast cancer is found at an early stage rather than a late stage.
- Medicare helps cover the cost of screening mammograms every other year.
- The North Carolina Comprehensive Breast and Cervical Cancer Control Program offers mammograms and Pap tests at no charge to income eligible women.

There may be a hardening of the “never had” group. In the 1990 NHIS, about half of the women who had never obtained mammograms said they did not intend to get them. Among women aged 51–75, only 11% of the women who had never obtained a mammogram expressed the intent to have one in the coming year. It appears that the women who have not yet had mammograms (or Pap tests) are a particularly challenging group, much like those smokers who have not yet quit. The characteristics of women who have never been screened and those who have been screened but do not intend to continue are very similar. Rakowski, Rimer, & Bryant (1993) found these characteristics include:

- Indicating less recent clinical breast examination and Pap tests.
- Having no regular source of health care.
- Being a smoker.
- Reporting no regular exercise.
- Not knowing how to perform breast self-examination (BSE).
- Living in a mobile home or trailer park.
- Having three or more people in the household.
- Not living in an urban area (designated as a Standard Metropolitan Statistical Area).

CHAPTER

2

Populations at Risk for Breast Cancer

Populations at Risk for Breast Cancer

Every woman is at risk for breast cancer. However, research has identified several factors that may increase the likelihood of developing the disease. Social and economic characteristics have been identified that make some women less likely to obtain screening services.

Risk Factors for the Development of Breast Cancer

Primary Risk Factors

Sex One out of eight women in the United States who live to be 85 years old or older will develop breast cancer during her lifetime.

Age Breast cancer incidence increases after age 45. The risk is greatly increased in older women and declines after women reach their mid 80's.

- 78% of breast cancer occurs in women over age 50.
- 50% of breast cancer occurs in women over age 60.

Personal History of Breast Cancer Women whose first breast cancer was diagnosed before age 50 are at greatest risk of having a second primary breast cancer. A contralateral primary breast cancer occurs in approximately 15% of women.

Family History of Breast Cancer Risk increases one to three times for mothers, sisters, or daughters of women with breast cancer. Risk

may increase seven to eight times in mothers, sisters, or daughters of women with **premenopausal, bilateral breast cancer.**

Fast Facts about Risk

- Every woman is at risk for breast cancer.
- Family history of breast cancer among first degree relatives (mother, sister, daughter) increases risk, though 75–80% of women who develop breast cancer have no family history of the disease.
- Age is the most influential risk factor for breast cancer. Risk increases with age.
- Personal history of breast, endometrial or colon cancer increases breast cancer risk.

Secondary Risk Factors

Parity Risk increases in women who never give birth and may be greater in women whose first full term child was born after age 30.

History of Benign Breast Disease History of fibrocystic changes in the breast that have been documented by biopsy with a diagnosis of atypical hyperplasia (ductal or lobular) increases risk.

Prolonged Hormonal Stimulation Risk may increase in the following situations:

- Early age at menarche: prior to age 12.
- Late age at menopause: after age 50, or 40 or more years of ovarian function.
- Hormone Replacement Therapy (HRT): possibly associated with a slightly increased risk, although the available data are difficult to interpret. Some researchers believe that the progestin component of HRT may have a greater impact than the estrogen component. To date, studies of oral contraceptives show no significant increase in risk (Henderson, 1993).

Radiation Exposure Excessive exposure to ionizing radiation may increase risk.

History of Other Cancers History of endometrial, ovarian, and/or colon cancer increases the risk for breast cancer.

Obesity and Dietary Fat Intake A greater incidence of breast cancer occurs in postmenopausal women who are obese. An increase in fat increases the amount of biliary steroids to digest the fats. Biliary steroids are converted to estrone and estradiol. In postmenopausal women, these are the primary sources of estrogen. The role of dietary fat consumption in the etiology of breast cancer continues to be researched.

Additional Factors

Socioeconomic Status Breast cancer is more common in women of higher socioeconomic status. This increased risk may be due to early menarche (which may or may not be related to socioeconomic status), late age for first birth, nulliparity, or bearing fewer children. Women with higher formal education are more likely to have their first child later. In addition, fat consumption in women of higher socioeconomic status may have contributed to this risk in earlier cohorts. Also, availability and accessibility of screening methods and health care may contribute to a higher incidence of reporting for this socioeconomic group.

Race In North Carolina, breast cancer occurs more often in white women than in women of color ages 35–85. Mortality is higher for women of color. This may be attributed to delayed diagnosis or presentation at a later stage by women of color. Increased participation in breast cancer screening may close this “racial gap” and decrease mortality for this group. However, even when studies control for stage at diagnosis, women of color have lower survival rates than white women.

Geography Women who live in the northern regions of North America and in northern regions of Europe have increased incidence compared with women living in the southern United States, southern Europe, Asia, and Latin America.

Alcohol Consumption Alcohol consumption may affect prolactin levels and later cellular membranes. These may in turn increase susceptibility to carcinogens.

Implants (no known risk) There is no published data showing an increased risk of breast cancer among women with breast implants.

Addressing the Needs of Special Populations

Older Women

Although older women are at greater risk for developing and dying from breast cancer, they are also at risk for under-utilizing breast screening. Older women who are poor or are women of color are at special risk.

Older women are a heterogeneous population. Programs should reflect this. Messages and materials directed at older women should follow principles of communication for older adults (Rimer, 1995). Thus, print should be of adequate size, with print and background reflecting good contrast. If possible, there should be multiple methods of communication (e.g., print and oral) for people who have deficits in one area or another.

Personal Susceptibility

Most older women do not know that the risk of breast cancer increases with age. Most women overestimate the importance of risk factors such as parity and underestimate the impact of the most important risk factor: age. Almost 75% of women who receive a diagnosis of breast cancer have no risk factor other than age.

Both younger and older women may discount their risk of getting breast cancer because they do not have a family member with breast cancer. Thus, they may not feel vulnerable to breast cancer. Messages directed at older women must address this misconception in a straightforward manner.

It may be useful for health care providers, as well as the educational materials they use, to state directly that women past menopause should have mammograms.

Barriers to Breast Cancer Screening for Older Women

- Low perceived susceptibility
- Lack of awareness
- Lack of recommendation by a health care provider
- Access

Referral

Because older women are less likely to visit gynecologists, and it is gynecologists who are most likely to recommend breast screening, older women are often overlooked for such screenings. Older clients should be encouraged to ask health care providers about the tests. Health care providers should be encouraged to discuss screening with older clients.

Early Detection

Many older women do not recognize that mammograms are needed in the absence of symptoms. Messages directed at older clients should stress this fact. Messages also should stress that mammograms are effective in detecting cancer early. This is important because older women are less likely than younger women to believe in the efficacy of these tests.

Lack of Awareness

Older women are less likely than younger women to be aware of mammograms. Messages may need to include some basic awareness building. An American Cancer Society survey found that older women were less likely to identify breast cancer as a primary health concern or to know any risk factors. Older women who have never been screened for breast cancer constitute a particularly challenging group.

Access

Distance to radiology facilities and lack of transportation are important barriers for older women, particularly in rural areas. Strategies may include providing and publicizing transportation, offering screening services at alternate sites, and using a mobile service van.

For more information about screening for older women, refer to the November 1992 issue of *The Journal of Gerontology*, Breast Cancer Screening in Older Women.

Women of Color

African American Women

African Americans comprise 93% of people of color in North Carolina. Data from national and regional surveys indicate that African American women under-utilize mammography. Significant strides have been made in the last few years and the racial gap is decreasing. Income is more important than race alone, and low income African American women are especially at risk for under-utilization. Messages aimed at African American women should include information about the recommended screening frequency and should encourage clients to ask their health care providers about screening. Because of the important role of religion for many African American women, the church may be an important channel for messages. Natural helper networks and community-based interventions may be helpful in reaching African American women (Eng, 1993; Lacey, 1989).

Cost

Concern about cost is a major barrier for some African American women. Messages should stress the availability of low cost or free mammograms.

Lack of Perceived Susceptibility

There is some evidence that African American women, particularly low income African American women, may feel less susceptible to breast cancer. Messages should address susceptibility.

Barriers to Breast Cancer Screening for African American Women

- Cost
- Lack of perceived susceptibility
- Pain
- Lack of awareness
- Fatalism
- Lack of health care provider referral

Concern about Pain

Several reports have found that African American women seem more concerned about pain associated with mammography than white women. Messages should address this concern. Messages from respected African American women could be used to address fear about pain. As well, intervening with radiologic technologists to raise their awareness of the differential concern about pain may be an important step in improving the mammography experience for African American clients.

Lack of Awareness

African American women, especially low income women, are less aware of breast screening. Messages should inform such clients about the relevant tests and why they are needed.

Fatalism

There is some evidence that African American women are more fatalistic about cancer than the general population. Information about breast cancer survival and benefits of early detection and treatment should be stressed.

Lack of Referral

African American women may be less likely to receive a health care provider referral for a mammogram. Strategies to empower African American clients to ask their health care providers about mammograms may be an important effort.

Hispanic/Latina Women

One population that repeatedly appears as an under-utilizer of both breast and cervical screening is Hispanic women. Hispanic women account for about 1.6 million of the unscreened women in North Carolina, and Hispanics are the fastest growing segment of the population (Harlan et al., 1991). Hispanic women are not homogeneous any more than other ethnic groups.

Hispanic women under-utilize most preventive health services. However, not all Hispanic women are equally at risk. Women who do not use English as their primary language are among those at highest risk. This group overlaps to a large extent with low income women who are also less likely to have health insurance. Socioeconomic status is the most important barometer of screening usage for Hispanic women. Older Hispanic women are particularly at risk for breast cancer and are less likely to be aware of their need for mammograms.

Embarrassment

Hispanic women, particularly those with low incomes, identify embarrassment as an important barrier to screening. Messages should address embarrassment directly. A video might show how a client’s privacy is protected during the mammogram. A brochure might show a woman saying that she expected the mammogram to be embarrassing but it was not, or that the embarrassment was worth it. Providing access to female health care providers may also help.

Radiation Concerns

Studies show that Hispanic women are more concerned than other women about radiation. Clients need to know that mammography is safe.

Barriers to Breast Cancer Screening for Hispanic Women

- Embarrassment
- Radiation
- Pain
- Cost
- Access
- Anxiety over results
- Communication barriers

Concern about Pain

Hispanic women seem to be concerned about pain associated with receiving a mammogram. The key message should be that most women do not find mammograms painful. Any discomfort is very brief. However, it is also important for radiologic technologists to recognize that clients have different pain thresholds.

Cost

Cost remains one of the most significant barriers for Hispanic women. Messages should highlight the availability of low cost or free mammograms and indicate where they are available.

Access

Hispanic women seem to be more concerned about access barriers, such as distance from the radiology facility and the time required for the appointment. Both health care providers and educational messages should highlight the availability of convenient mammography services. Providing and publicizing transportation, providing screening services at alternate sites, and using a mobile service van are also possible strategies for overcoming this barrier.

Anxiety Concerning Results

Hispanic women may worry more while waiting for their test results. To reduce anxiety, messages should highlight the fact that most mammograms are normal. Efforts should be made to reduce the delay between test and result, and to identify the subset of clients most likely to be made anxious during the process and to intervene with them.

Communication

Communication barriers remain a problem for some Hispanic women served by health care providers who do not speak Spanish. Health care providers should be especially careful about checking for understanding and stressing the need for follow up. When possible, having a bilingual health care provider or assistant present may increase the effectiveness of health messages.

Native American Women

In North Carolina there are two primary tribes, the Lumbee and Cherokee. Cancer incidence in North Carolina is reported with a designation of “American Indian” and with specific tribal indication. The number of cancers reported thus far is too small for meaningful interpretation, yet attention is focused on Native Americans because of suggestions of unusual cancer patterns among reservation populations in the western United States.

Native American women may experience difficulty utilizing the health care system and following prescribed screening and treatment modalities due to cultural beliefs and circumstances. Limited knowledge about cancer, low income, minimal and unpleasant experiences with health care, and communication problems all present challenges to Native Americans and their health care providers.

Cost

Native Americans comprise some of the lowest income populations in North Carolina. As such, Native American women may be more likely than others to be without health insurance and be unable to afford or think that they can afford regular breast cancer screening services. Messages should highlight the availability of low cost or free mammograms and indicate where they are available.

Access

Low income and regional isolation combine to make transportation to health care facilities an important issue to be addressed. Providing transportation and offering screening services at alternate sites and using a mobile service van are strategies for overcoming this barrier.

Barriers to Breast Cancer Screening for Native American Women

- Cost
- Access
- Health care system experiences
- Communication barriers

Negative Experience with the Health Care System

Western medicine is sometimes in conflict with Native American cultural beliefs. Native American women may be more likely to feel embarrassed, insulted, assaulted, or otherwise uncomfortable with the health care they receive than other women. Health care providers serving this population must develop an understanding of the cultural norms of their clients and be prepared to adjust their professional behavior accordingly. Consulting with Native American health care providers and seeking feedback from Native American clients may assist addressing these issues.

Communication

Communication barriers are becoming less common for Native Americans seeking care in non-Native American health care settings, though it remains a problem for some segments of the population, particularly among older people. Even when the client is bilingual, the communication of the urgency or non-urgency of the situation, for example, may be lost in the “translation.” Health care providers who serve Native Americans with limited experience within the health care system should be especially careful about validating for understanding and stressing the need for follow up. In addition, bilingual health care providers may communicate health messages more effectively.

Lesbians

The overall risk of breast cancer among lesbians is not known. There is evidence to suggest some lesbians may have a higher incidence of nulliparity, delayed child-bearing, and increased alcohol consumption compared with heterosexual women. In addition, lesbians who are estranged from their families because of their sexual orientation may not have accurate information about their family's medical history, including breast cancer risk factors.

Unfortunately, current research about women who partner with women has drawn its samples mostly from younger, white, well educated, "out of the closet," lesbian-identified women. Lesbians who may be at greater risk of morbidity and mortality due to limited access to cancer screening and appropriate medical care have remained inadequately studied. These include, among others, older lesbians, lesbians of color, those with disabilities, low income lesbians, and those who live in rural areas.

Research has indicated significant barriers to cancer screening and medical services even among women with the greatest access to care. Lesbians received fewer mammograms and clinical breast examinations and were less likely to perform regular breast self-examination than recommended by current standards of care. Lesbians may also be more likely to delay care until problems are advanced or complex, due to past negative experiences with the health care system. (Rankow, 1995).

Outreach and educational efforts targeted to women who partner with women, inclusion of lesbians in mainstream messages, and efforts to enhance health care provider sensitivity to the issues and concerns of their lesbian clients are strategies to improve screening utilization and optimize quality of care.

CHAPTER

3

Breast Cancer Screening

Screening for breast cancer is defined as the periodic examination of asymptomatic women to detect breast cancer in its earliest stage. Breast cancer screening includes mammography and clinical examination of the breasts. Breast self-examination is recommended to complement this program.

Breast Self-Examination

Breast self-examination (BSE) consists of systematic monthly inspection and palpation of the breasts to detect a change in one or both breasts.

Breast self-examination should be used in conjunction with a regular program of clinical breast examination. While results from population-based prospective studies of the efficacy of breast self-examination are inconclusive, the National Cancer Institute, the American College of Radiology, and the American Cancer Society all recommend breast self-examination as a low cost, non-invasive screening test and an appropriate adjunct to clinical examination and mammography.

Comprehensive education about breast self-examination includes:

- ☒ Providing information about normal breasts and breast disease.
- ☒ Demonstrating the technique.
- ☒ Observing the client performing breast self-examination.
- ☒ Reinforcing continued breast self-examination practice.

Breast Self-Examination Fast Facts

- Beginning at age 20, women need to do monthly breast self examinations as part of their breast health program.
- When they find changes in their breasts, women need to notify their health care provider promptly.
- The five P's of breast self-examination include position, palpation with pads, pressure, perimeter, and pattern.

Frequency and Rationale

- The American Cancer Society recommends monthly breast self-examination throughout a woman's life beginning at age 20.
- Regular breast self-examination enables a woman to know her own breast tissue and to recognize changes more quickly.

Timing

- If a woman is menstruating, BSE should be performed on the last day of her period.
- If a woman does not menstruate, BSE should be performed on the same day each month. Counsel non-menstruating clients to integrate BSE into another monthly event or routine.
- It is not necessary to examine both breasts at the same time (i.e., BSE may be performed on one breast in the morning and the other breast in the evening).

Breast Changes

- If a woman recognizes a change in her breast(s) or is uncertain about something she feels in her breast(s), she should promptly contact her health care provider and be examined.
- A client should feel free to communicate her concerns to her health care provider. The client needs to feel heard, have questions answered, and realize that a second opinion is an option. She should feel comfortable and confident with the plan of action developed by her and her health care provider. Her health care provider should be prepared to make referrals for further information and support.

Reinforcement

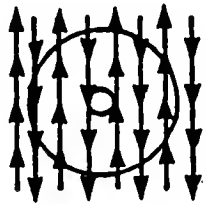
Reinforce any efforts the client has made toward doing BSE, even if they are minimal. Never chastise. Encourage.

Provide feedback as the client performs BSE in the examination room.

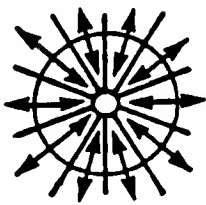
The Five P's of Breast Self-Examination

- 1 Position** While standing in front of a mirror, visually inspect the breasts, three positions:
 - With arms relaxed at the side, looking straight ahead.
 - With hands at the waist, rolling shoulders forward.
 - With arms straight up, bending forward slightly.
- 2 Perimeter** Breast tissue extends beyond what is enclosed by the bra cup. The area to be examined extends from the sternum, across the clavical, down the mid axillary line, and along the bottom of the bra line.
- 3 Palpation with Pads** The woman should use the pads of her three middle fingers. The pads provide a greater surface area than the finger tips and are more sensitive.
- 4 Pressure** In order to feel all the way through the breast tissue, a woman will need to use varying levels of pressure. In each spot, she should make three circles varying in pressure from light to medium to deep. This should not be painful but will allow her to feel through the tissue to the chest wall.
- 5 Pattern** It is important to choose a pattern which the health care provider and client are comfortable with. There are three patterns commonly used:

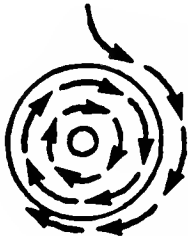
Vertical strip Begin in the axilla and move across the breast tissue in strips, proceeding up and down the breast.



Wedge The breast is divided like the spokes of a wheel. Examine each segment separately, moving from the outside edge to the nipple.



Circle Begin at 12 o'clock and examine in a circular manner from the outside edges toward the nipple. The circles get smaller moving inward.

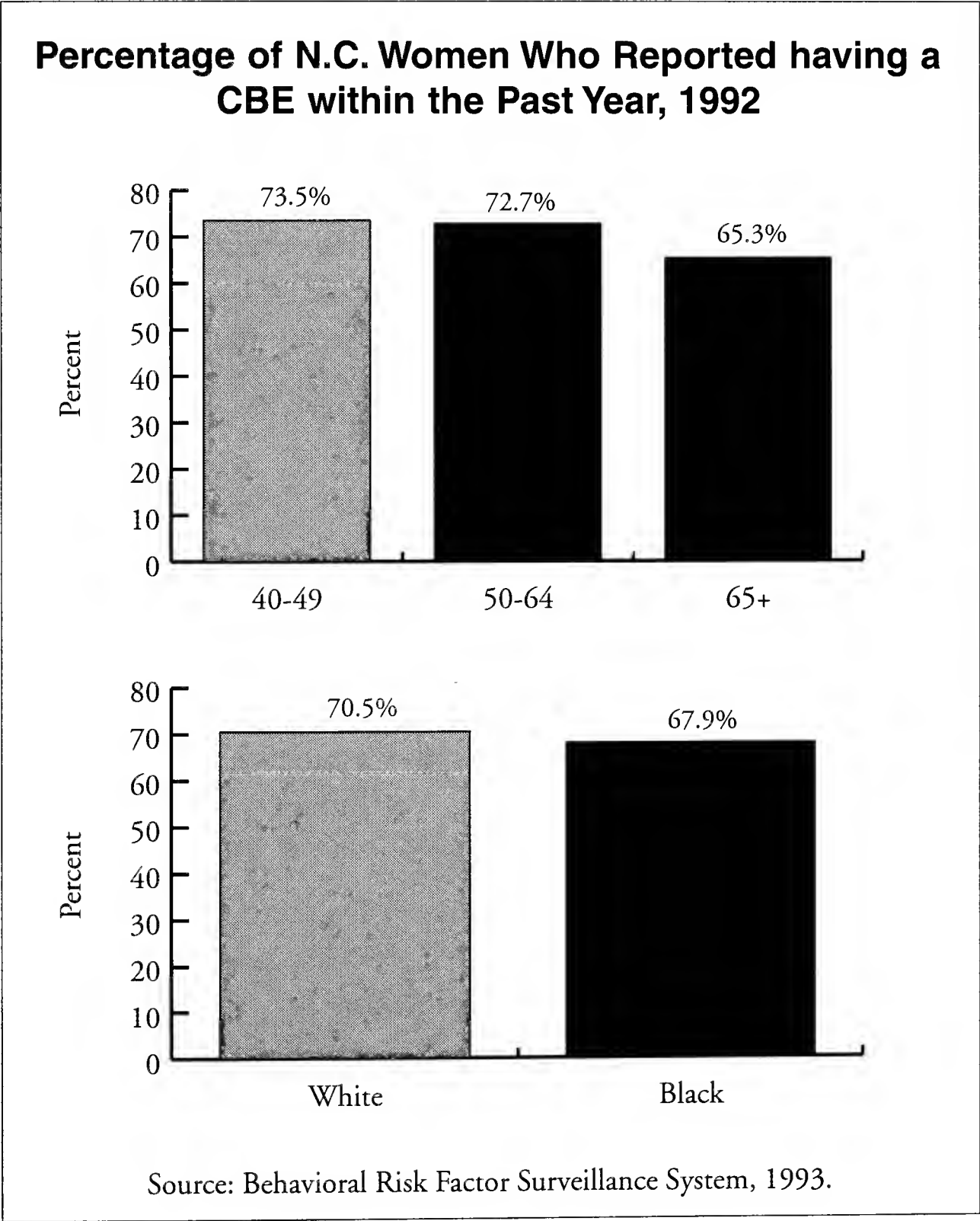


The BSE technique is described in detail on the client education pages at the back of this handbook.

Clinical Breast Examination

The examination should be conducted in a setting allowing for minimal distraction and adequate privacy. Examination gowns should be adjusted to minimize unnecessary exposure of the client. The examinations should be conducted unhurried. A complete **clinical** breast examination (CBE) should take from 5 to 10 minutes.

Before the examination, find out what concerns, fears, and/or barriers to consistent care the client may have. Concerns, such as the fear of finding cancer should be addressed by emphasizing the high success rate of treatment when cancer is detected early.



Prior to initiating the examination, determine where the client is in her menstrual cycle and if her breasts are tender. Ask if she has any questions or if she experiences pain during the examination.

Since the health care provider is in close proximity to the client, minimal eye contact is recommended. To preserve modesty, only uncover the breast to be examined. Touch the body only with the palpations. Do not allow the non-examining hand to rest on the body.

As part of the breast examination, a breast health history should include:

- ☒ Identification of present breast symptoms.
- ☒ Description of lumps, pain, nipple discharge, changes in shape, difference between breasts, cyclical tenderness, skin changes, age at first mammogram, date and result of last mammogram, location of last mammogram, and previous breast surgery (date, health care provider, location, biopsy results).
- ☒ Review of family history of breast cancer and age at diagnosis (mother, daughter, sister).

The CBE should be performed yearly on all clients over age 40. The American Cancer Society recommends CBE every 3 years for clients ages 20–40. For clients in a high risk group for breast cancer, yearly clinical examinations should begin at age 30.

Technique

Palpations

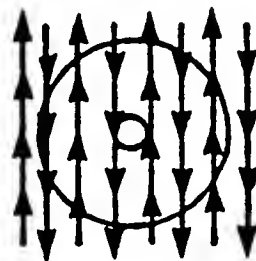
- Use three middle fingers, held together.
- Concentrate on palpating with the **flats** or **pads** of those fingers.
- The palpation motion should consist of small circles, about the size of a dime.
- The circular motion should be smooth and well controlled.
- For each area of breast tissue examined, a series of three distinct pressure levels should be used.
 - The first circle at each spot should be made using a **very light amount of pressure**.
 - The second circle should press midway down into the breast.
 - The third circle should **press down as firmly** into the breast tissue as possible without causing discomfort. This may allow more pressure than you realize.
- Palpation pressures should always be directed straight down, against the plane of the client's chest wall.

The Search Strategy

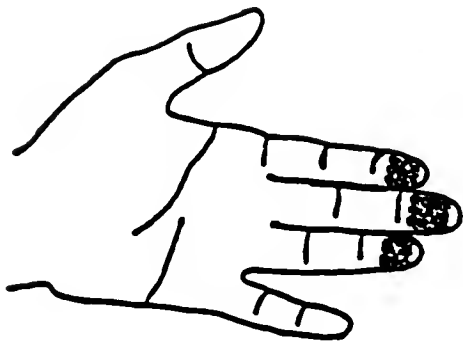
To distribute breast tissue as evenly as possible, the client should be positioned on her side for examination of the lateral tissue and in a supine position for examination of the medial tissue.

The breast tissue to be examined includes a roughly rectangular area. This rectangle begins laterally with the mid-axillary line and is bounded by the clavicle, the sternum, and approximately the fifth rib. All tissue within this rectangle should be examined thoroughly.

The recommended search pattern involves arranging palpations in vertical strips, transversing the entire breast area. Optimally, palpations and strips should overlap slightly to ensure thorough examination of all tissue.



Finger Techniques for CBE

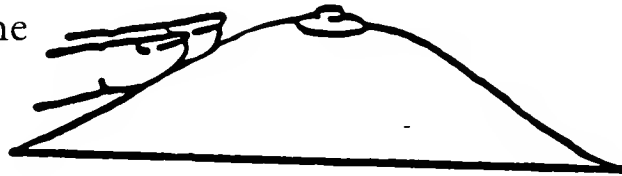


- A** Use the pads of the three middle fingers.



- B** At each spot, make three small circles about the size of a dime.

- C** Use light pressure for the first circle.



- D** Use medium pressure for the second circle.



- E** Use deep pressure for the third circle.



Components of the CBE

With the client sitting:

- ☒ Inspect for asymmetry, abnormal superficial vascular patterns, dimpling, nipple retraction, and peau d'orange.
- ☒ Palpate axillary and supraclavicular/infraclavicular nodes. Note size, location, mobility, and consistency of nodes palpated.

With the client supine:

- ☒ Inspect and palpate.

Client Education

Written materials should be provided to the client, including recommendations for BSE, CBE, and mammography. These materials should discuss the following limitations of screening:

- Normal results on a screening examination do not necessarily indicate absence of disease.
- No screening test is 100% accurate. Therefore, some cases of breast cancer may be unavoidably missed.
- Normal results do not rule out later development of breast cancer, which is why annual screening is strongly recommended.
- Detection of an abnormality does not mean cancer. Approximately 10% of clients with abnormal screening results will be diagnosed with breast cancer after further evaluation.

Mammograms

Mammography is the most effective method for detecting early stage breast cancer. Scientists estimate that if women followed the breast cancer screening guidelines, breast cancer deaths would decline by at least 30%.

Types of Mammograms

Screening Mammography This is a radiologic examination used to detect unsuspected breast cancer at an early stage in asymptomatic women. A mammogram may be designated as screening if the client is scheduling a routine examination, an annual examination, or if she has fibrocystic changes. The intention is to determine whether the client has a low or high probability of breast cancer. This examination may be performed without a physician in attendance. The examination should ordinarily be limited to craniocaudal and mediolateral oblique views of each breast. On occasion, supplementary views may be required to visualize breast tissue optimally, but such views should not be obtained routinely. Where pathology is suspected, a recommendation for additional imaging studies, a diagnostic mammogram, or a biopsy may be warranted.

Diagnostic Mammography This is a radiologic examination used to evaluate a client with a breast mass, other signs or symptoms, an abnormal or questionable screening mammogram, or augmented or reconstructed breasts. The mammogram should be correlated with known physical findings and symptoms. Multiple views may be indicated. The

diagnostic mammogram may indicate that there is a need for additional imaging modalities in some clients. Diagnostic imaging should be performed under the direct on-site supervision of a qualified radiologist.

Mammography Fast Facts

- A mammogram is a safe, low dose x-ray.
- Mammograms may detect cancer or a mass 2–3 years before it can be felt.
- Twenty percent of women with breast cancer will have a normal mammogram.
- Clients with breast augmentation should obtain instructions from their health care providers regarding mammography.

Screening Guidelines for Asymptomatic Clients

Clients Ages 40–49

Assess for personal risk factors. Clients in a high risk group may benefit from yearly screening. Characteristics that *may* increase risk include:

- Personal history of breast cancer.
- Family history of breast cancer (first degree relative with premenopausal breast cancer).
- Mother, daughter, or sister with a history of premenopausal bilateral breast cancer.
- Biopsy-proven moderate, severe, or atypical epithelial hyperplasia (especially in combination with a positive family history).
- Ductal carcinoma in situ.
- Nulliparity or age 30 or older at first live birth.

Since the one in eight risk for women is based on data from all women and accounts for assorted risk factors, additional risk factors can not be summed when calculating a client's risk of developing breast cancer.

Biannual screening should be discussed with clients in a lower risk category.

Clients Ages 50 and Older

An annual bilateral screening mammogram is appropriate.

Clients Needing Screening Mammograms

While there is agreement regarding the benefits of screening women 50 years of age and over, there has been uncertainty about the effectiveness of mammography screening between the ages of 40 and 49.

Follow up data from the Health Insurance Plan (HIP) study suggest that women ages 40 to 45 who receive periodic mammography and clinical examination may experience a reduction of about 25% in breast cancer mortality, but the investigators and others have not found this to be statistically significant.

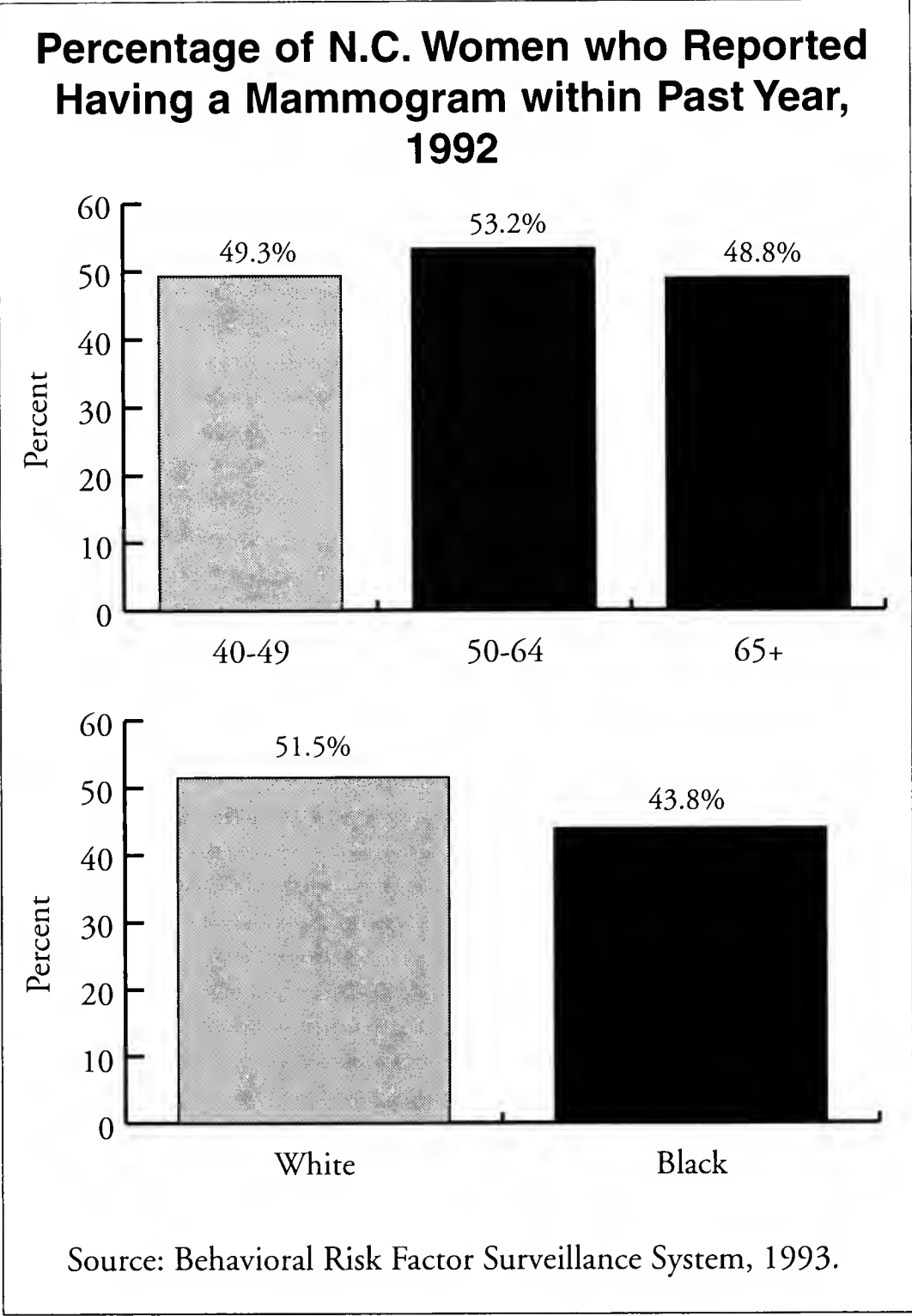
No reliable data is available on the optimal age to conclude screening. Uncertainties exist regarding the effectiveness in asymptomatic women over age 75 with consistently normal results. While these issues are not settled, 11 major organizations have embraced current American Cancer Society guidelines which recommend screening every 1–2 years for women ages 40 through 49 and annually for women ages 50 and older.

In addition, the National Cancer Institute (NCI) has announced its intentions to withdraw guidelines for breast cancer screening and substitute a statement of evidence. The following is a brief version of the statement:

Ages 50 and Above *NCI recommends women be screened every 1–2 years with mammography and receive an annual CBE. Women ages 70 and above should be screened unless otherwise indicated by health status.*

Ages 40 to 49 *NCI recommends women discuss with a health professional the advisability of breast cancer screening with mammography, taking into account family history of breast cancer and other risk factors. NCI also recommends annual CBE as a prudent practice for this age group.*

Self-Examination
NCI recommends as prudent practice monthly breast self-examination for all women 20 years old and above, along with consultation with a health professional on proper breast self-examination techniques.



Prior to the Mammogram

If the client will be using a mammography facility for the first time, existing films available elsewhere should be requested for comparative analysis.

Forward results of CBE to the mammography facility.

Clients with breast implants should be referred to a radiologist with experience in performing mammography on these women.

Responsibilities of the Referring Health Care Provider

New federal guidelines provide a step-by-step outline of the responsibilities of physicians and other members of the health care team in providing high quality mammograms. Under these guidelines, referring health care providers are responsible for:

- ☒ Informing clients that mammography is the most sensitive and specific screening test for breast cancer available.
- ☒ Informing clients that a negative mammogram does not rule out malignancy in the presence of a palpable mass or other breast abnormality, and that a biopsy of an abnormality may be needed despite a negative mammogram.
- ☒ Explaining that a lump or other abnormal finding which develops after a negative screening examination should be evaluated as soon as possible and not delayed until the next screening examination.
- ☒ Establishing protocols with the mammography facility to ensure that the communication loop is closed and that the roles of the referring health care provider and the facility in communicating results and tracking compliance are understood by all parties.

The client education pages at the end of this handbook may be a helpful first step in providing information about mammograms to clients scheduled for or considering an examination.

Choosing a Mammography Facility

Recent concerns about the quality of mammography have made headlines. With women being encouraged to obtain screening, health care providers have a responsibility to ensure that mammography poses a low radiation risk and is of optimal quality. Furthermore, health care providers must ensure that all aspects of mammography, including personnel involved in positioning clients and interpreting films, reports, and clinical outcomes of positive mammograms are part of an overall chain of quality assurance.

Federal law required that all mammography facilities in the United States (except those of the Department of Veterans Affairs) be FDA certified by October 1, 1994.

The Mammography Quality Standards Act (MQSA) of 1992 authorized the Food and Drug Administration (FDA) to establish nationwide baseline quality standards. The MQSA standards are very similar to those of the American College of Radiology

(ACR) and of certain states. MQSA, for the first time, provides for on-site inspection and enforcement. It is clearly the intent of these standards to provide universal access to quality mammography.

The regulations require that all facilities which provide, process, or interpret mammograms meet quality standards. These include standards for personnel engaged in mammography: the interpreting physician, the medical physicist, and the radiologic technologist. Essentially, the regulations require these health care providers to have licenses, be board certified or have specified training in mammography, meet minimum practice requirements, and receive continuing education.

In addition, the facility must use only dedicated mammography x-ray machines. These machines must have a compression device and removable grids (except in xeromammography machines).

Each facility needs to maintain a quality control and quality assurance program on all radiographic equipment (processors, films, image receptors).

Mammography facilities must prominently display a certificate or provisional certificate issued by the FDA. A provisional certificate will be issued to a facility that has applied to a private or state accrediting body for accreditation but has not yet received it.

A written report of results must be signed by the interpreting physician and sent to the referring health care provider.

Finally, the mammography facility must have a system of reviewing outcome data from all mammograms performed, including the follow up of positive mammograms and correlation of surgical biopsy results with mammography reports.

Cost Considerations

In addition to quality, another important consideration is cost. Most mammograms cost between \$50 and \$150. More than 40 states including North Carolina now have laws requiring health insurance companies to reimburse some of the cost of screening mammograms. For women 65 and older, the Medicare program covers some of the cost of screening mammography once every 2 years.

Since 1992, the Centers for Disease Control and Prevention (CDC) has provided federal funding for North Carolina’s Comprehensive Breast and Cervical Cancer Control Program (BCCCP). All 100 counties in North Carolina and the Cherokee Nation Health Delivery System provide free or reduced cost screening for breast cancer for income eligible women. The BCCCP provided breast screening services to over 20,000 women during the January 1993–1995 period. Unfortunately, available funding will serve only a small portion of the eligible North Carolina women.

Some health service agencies and employers provide mammograms free or at low cost. Low cost does not equate with low quality. A large survey found that some of the facilities charging the lowest fees (often because they deal in large volumes) were among the best in terms of meeting high quality standards (Breen & Brown, 1994).

Status of Mammography in North Carolina in June 1995

14 counties have no mammography facilities. These counties are:

Camden	Madison
Caswell	Northampton
Clay	Pamlico
Currituck	Perquimans
Gates	Tyrrell
Hoke	Warren
Hyde	Yancey

For Clients with Implants

Mammography of clients with breast implants should always be considered diagnostic, even if clients are asymptomatic. Diagnostic mammography of clients with breast implants requires special handling and positioning. Four views of each breast, rather than two, should be taken.

Although unsuspected breast cancer can be detected on mammograms of clients with implants, mammography is more difficult to perform. Mammography has not been proven effective for breast cancer detection when implants have been used for breast reconstruction after total mastectomy. Regular CBE should be performed in these cases.

Mammography of asymptomatic clients with breast implants should include both implant-included and implant-displaced views whenever possible. In the implant-displaced views, the radiologic technologist manually displaces the implant toward the chest wall while bringing breast tissue forward so that it can be adequately compressed. This maneuver results in an improved image of anterior breast tissue (Agency for Health Care Policy and Research, 1994).

Future Considerations

MRI uses magnetic fields to produce sharp contrasted images of glandular tissue and tumors. The patient is injected with a dye. Drawbacks include cost, special equipment, and expertise only available in selected areas. Most promising uses are for clients with dense breasts, clients with implants, and those at high risk for breast cancer.

PET Scans identify changes in cell metabolism instead of in the breast tissue structure itself. The client is injected with a radioactive compound that shows “hot spots.” A major drawback is cost as well as false positive results. Most promising is that this technique can see through very dense breasts and locate tumors missed by mammography. PET scans can also identify metastases in the lymph nodes and the entire body.

Digital Mammography (computer-assisted) is a variation of conventional mammography. It may be available in 2 years but is not likely to be used for routine screening until studies that compare it with conventional mammography are available. It should improve image quality, with less radiation exposure. With digital mammography, there is no need to process films. Images can be sent by computer to specialists who can provide immediate consultation.

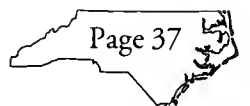
CHAPTER

4

Diagnosis and Referral

Diagnosis and Referral

An abnormal clinical breast examination or mammogram should generate referral to a surgeon or physician with expertise in breast problems. A normal mammogram does not rule out cancer if a client has a mass discovered through clinical breast examination.



Management of Palpable Masses

Solitary, Well-Defined Palpable Mass

Clients with discrete solid masses should be referred to a surgeon or a physician with expertise in breast evaluation.

It is appropriate to order a diagnostic mammogram concurrently with referral to a surgeon for a client over 35 years of age with a solid mass. The mammogram will define characteristics of the mass and will look for non-palpable synchronous lesions in either breast.

Fine needle aspiration (FNA) or core biopsy is frequently an appropriate extension of evaluation of a palpable mass.

Most masses should be removed regardless of a client's age. The advice applies not only to lesions thought to be suspicious of cancer but also of lesions thought to be benign. If a lesion is benign on a mammogram and an FNA/biopsy, a client in consultation with her health care provider may decide to have the mass removed. For some clients, if a mass is not removed it may cause continued concern and anxiety. For others, they may choose to monitor a benign appearing mass.

Unfortunately, a large percentage of "palpable masses" are perceived by the client, but not considered a palpable mass by the health care provider or surgeon. The range of abnormalities that women feel and call a "mass" is wide. The health care provider may feel this area only as slightly lobulated breast tissue, particularly premenstrually; an area of diffuse poorly defined thickening that may or may not be matched in the opposite breast; or an area of irregularity or prominence such as nodular breast tissue. If there is any sense of concern or anxiety on the client's part, it is sound practice to advise her to return monthly or bimonthly for reexamination until she is reassured of the benign or functional nature of the changes. In menstruating clients, return visits should be timed between menstrual cycles (1-2 weeks after the menses is completed).

If there is significant doubt in the client's or surgeon's mind about the nature of a non-discrete "mass," a directed needle aspiration for cytology can be performed to obtain specific cellular information.

The presence of discomfort and pain is not a reason to assume that the lesion is benign. While painful or tender areas in the breast are usually functional in nature, caution should be exercised to avoid over-interpreting the benign implication of this symptom.

Cysts

A palpable mass suspected to be a cyst should be evaluated and confirmed by aspiration. If the primary care physician does not routinely perform aspirations, referral to a surgeon is appropriate. If a cyst is aspirated, the client should be reexamined for cyst recurrence at approximately 6 to 8 weeks. Rapid recurrence of a cyst after aspiration should lead to surgical referral. There is no indication for routine ultrasonography in such clients, however. The ultrasound is most useful if there is an abnormality detected on the mammogram which is not palpable. The ultrasound can then determine if the lesion is cystic or if it is solid and a biopsy should be performed.

If a client is over age 40, obtain a mammogram prior to the cyst aspiration. A cyst aspiration can make it difficult to interpret films, particularly if a hematoma develops.

If the mass does not disappear completely with aspiration or if the aspirated fluid is grossly bloody, the fluid should be sent for cytologic analysis and the client referred to a surgeon. Cyst fluid does not otherwise need to be analyzed.

Follow Up Routine

For Normal Screening Examination (both CBE and mammogram):

Notify the client of the findings, including the need for ongoing screening and the procedure for reminding the client of when her next screening examination is due.

For Abnormal Mammogram (with normal or abnormal CBE):

After conferring with the client, arrange for follow up and/or surgical consultation.

For Abnormal CBE (mammogram within normal limits):

After conferring with the client, refer for surgical consultation or to breast clinic.

Vague Thickening or Nodularity Not Suspicious of Cancer

For premenopausal clients, reexamine at mid-cycle after one or two menstrual cycles. If a localized area remains abnormal after repeated examinations, refer to a surgeon.

Questionable areas in a postmenopausal client, including those postmenopausal clients on estrogen replacement, should be referred to a surgeon for consideration of fine needle aspiration or biopsy. The role of fine needle aspiration in this setting has not been completely established. Referral to a surgeon is the preferred approach.

It is appropriate to order a diagnostic mammogram with referral to diagnose synchronous lesions in any client over age 35 if a mammogram has not been performed within 6 months.

Nipple Discharge or Skin Changes

The nature of the nipple discharge should be defined by a careful history. A client with a spontaneous, unilateral clear, serous, or bloody discharge should be referred to a surgeon. Cytologic analysis of nipple discharges is rarely useful and should not be performed.

Bilateral multiple duct discharge is almost always benign. Medical work up of galactorrhea may be appropriate for profuse, persistent milky discharge, but pituitary adenomas are rare.

Clients with skin breakdown on the nipple-areola complex should be referred to a surgeon. Biopsy of the nipple may be indicated to differentiate eczema or other dermatological conditions from Paget's Disease.

Breast Pain

If the physical examination and mammogram are negative, the most likely diagnosis is fibrocystic or functional changes. An explanation of the role of hormonal cycling will reassure most clients. A trial of nonnarcotic analgesics such as acetaminophen, aspirin, or ibuprofen and the use of a bra which provides good support are suggested. Elimination of caffeine, chocolate, or salt from the diet has not been found to be beneficial in scientific studies. However, some clients report improvement in cyclical pain with the reduction of caffeine, and this may be suggested. There is no role for male hormones or vitamin therapy. Refer to a surgeon if there is persistence of localized pain not responsive to conservative measures.

Management of Non-Palpable Masses

There are five categories designated by the American College of Radiology for mammogram reports. These include:

- I. Negative
- II. Benign Finding
- III. Probably Benign or Equivocal
- IV. Suspicious Abnormality
- V. Highly Suggestive of Malignancy

For IV and V, always refer to a surgeon. If the mammogram reading is equivocal (III) and the radiologist recommends follow up versus biopsy, refer to a surgeon or physician who is experienced in breast evaluation. If further mammographic evaluation with spot compression, magnification, or ultrasound is suggested, it is appropriate to obtain these prior to a physician referral since many equivocal mammographic abnormalities may be resolved with additional radiological work-up.

In a screening setting, an indeterminate or incomplete assessment may be reported. Additional evaluation is then recommended before a final opinion can be rendered. An incomplete assessment **always** requires further action on the part of the client and the health care provider who is responsible for follow up.

Non-Palpable Cysts

Non-palpable cysts detected by mammography and confirmed by ultrasound as simple cysts (i.e.: without debris or ragged walls) need not be aspirated except for relief of pain. A presumed non-palpable cyst found to have suspicious characteristics by ultrasound should be subjected to directed biopsy or aspirated with sonographic guidance. The primary role of ultrasound is to determine the nature of a non-palpable lesion found on the mammogram (cystic versus solid).

Non-Palpable Masses

A decision about what form of evaluation or biopsy is most appropriate for any given non-palpable lesion discovered by mammography or ultrasound should be made by the surgeon in consultation with the radiologist. Options include:

- Mammographic or ultrasound guided fine needle aspiration.
- Stereotactic core needle biopsy.
- Large core biopsy or open surgical biopsy after needle localization.

Special Considerations

Pregnant or Lactating Clients with Breast Masses

Physical diagnosis of breast cancer may be extremely difficult in these situations. It is important to refer these clients to a surgeon. Approximately 1 in 2,000 pregnant or lactating women has breast cancer.

Persistently Worried Client with a Negative Work-Up

It is appropriate to refer a persistently worried client to a surgeon for a second opinion. Further educational resources and support organization referrals may also be offered.

CHAPTER

5

Resources for Information and Referral

Resources for Information and Referral

There are many breast cancer resources available to health care providers in North Carolina and to the clients they serve. Refer to the organizations listed here to locate support for women with breast cancer and their families and friends, to locate educational services and materials about breast cancer detection and treatment, and to obtain the latest technical information.

Improving Quality of Life for Women with Breast Cancer

Health care providers and clients have learned the value of mutual support among women with breast cancer. When someone with a serious illness feels frightened or depressed, it often helps to discuss these feelings with another person who has been through the same experience. This can assist women in obtaining practical information, understanding their feelings, and developing their own ways of handling their problems.

The American Cancer Society • Reach to Recovery



(919) 834-8463 Raleigh, North Carolina

The American Cancer Society (ACS) is a nonprofit organization offering a variety of services to women and their families. Special help for women with breast cancer is provided through their *Reach to Recovery* program. Trained volunteers who have themselves had breast cancer visit women at the health care provider's request and provide emotional support to women before and after treatment. Volunteers share their experiences with breast cancer treatment, breast reconstruction, and rehabilitation. *Reach to Recovery* also provides family members with information to assist them in better understanding some of the problems women may have. The ACS also conducts a variety of support groups. To obtain information about local services and activities and for referral to ACS field staff serving each county, call the ACS's North Carolina office at the number above or contact your local ACS office.

ENCORE


ENCORE (Encouragement, Normalcy, Counseling, Opportunity, Reaching Out, Energies Revived), sponsored by the Young Women's Christian Association (YWCA), is a program for postoperative breast cancer patients. The program includes exercise to music, water exercises, and a discussion period. A woman may join a group the third week after surgery, with her health care provider's permission. The Encore Plus program also promotes breast cancer screening. For further information, consult the local YWCA listed in the telephone book.

National Lymphedema Network

 **(800) 541-3259** San Francisco, California

The National Lymphedema Network (NLN) is a nonprofit resource center established to provide information and guidance to women and their health care providers about primary and secondary lymphedema and other venous disorders. The NLN provides a counseling hotline program, a referral service to medical and therapeutic centers throughout the United States, information and advice on locating or establishing local support groups, national and international conferences, and a newsletter with updated information on lymphedema.

The National Coalition for Cancer Survivorship

 **(505) 764-9956** Albuquerque, New Mexico

The National Coalition for Cancer Survivorship (NCCS) is a network of cancer survivors and their organizations across the United States. The NCCS helps cancer survivors and their families start local support groups or contact existing ones, sponsors a clearinghouse of national resources for support and information on life after a cancer diagnosis, provides advice to reduce cancer-based discrimination, and serves as a unified voice of cancer survivors. To find a local NCCS group, contact the national office at the number above.

National Alliance of Breast Cancer Organizations



(212) 719-0154 New York City, New York

The National Alliance of Breast Cancer Organizations (NABCO) is a nonprofit organization that provides women with information for making informed decisions concerning cancer treatment. This organization can locate local support groups.

Of particular interest to health care providers is NABCO's annual *Breast Cancer Resource List*. This resource is a list of materials about breast cancer, many of which are free. The guide may be purchased for \$3 by calling the phone number above. Topics include:

- Breast examinations
- Benign breast disease
- Treatment choices (biopsy, surgery, reconstruction, radiation)
- Chemotherapy
- Personal resources (turbans, wigs, insurance, nutrition, exercise)
- Coping
- Information and support
- Regional support organizations
- Materials for health care providers

General Information

Health care providers may want more general information for themselves, their clients, and their clients' families. The services listed below will help them obtain what they need. Additional information is available from local libraries, bookstores, and support groups.

Cancer Information Service (CIS)

 **1-800-4-CANCER (1-800-422-6237)**


The CIS, a program of the National Cancer Institute (NCI), provides a nationwide telephone service for people with cancer, their families, the public, and health care providers. The staff can answer questions and can provide booklets about cancer. The CIS also maintains an updated list of providers of low cost breast cancer screening and referral resources for each county. They also may know about other local resources and services. One number connects callers with the office that serves their area. Spanish speaking staff members are available.

American Cancer Society (ACS)

 **(919) 834-8463** Raleigh, North Carolina

The ACS is a voluntary organization with a national office and local units all over the country. In North Carolina, the ACS has field staff in counties throughout the state. The ACS supports research, conducts educational programs, and offers many services to women and their families. To obtain information about local services and activities and for referral to ACS field staff serving each county, call the ACS's North Carolina office at the number above or contact your local ACS office.

CancerFax

 (301) 402-5874

The National Cancer Institute's CancerFax service provides current cancer treatment information including treatment information summaries and supportive care information summaries from the Physician Data Query (see below). By calling the phone number above, users can have information in Spanish or English sent directly to a facsimile machine.

Physician Data Query (PDQ)

People who have cancer, their families, and their health care providers need current and accurate information about cancer treatment. To meet these needs, The National Cancer Institute (NCI) developed PDQ. This computer database provides quick and easy access to: current treatment information, screening guidelines, a list of approved screening facilities, information about clinical trials that are open to women and that test new and promising cancer treatments, and names of organizations and providers involved in caring for people with cancer.

To access PDQ, health care providers may use an office computer or the services of a medical library. The CIS (1-800-422-6237) can provide information about using the PDQ system. Information specialists at the CIS use a variety of sources, including PDQ, to answer questions about cancer prevention, diagnosis, and treatment.

For additional written resources about cancer; information about site-specific cancers, their treatment, and possible side effects; and nutritional information and recipes for people with cancer, call the CIS.

Send a written request to:

Office of Cancer Communications
National Cancer Institute
Building 31, Room 10A24
Bethesda, Maryland 20892

North Carolina Comprehensive Breast and Cervical Cancer Control Program (BCCCP)

BCCCP endeavors to increase screening, early detection, and follow up care among low income, high risk women (particularly women of color and older women). The program provides evaluation and follow up and promotes increased public knowledge and awareness about breast and cervical cancer.

All 100 counties in North Carolina and the Cherokee Nation Health Delivery System provide free or reduced cost screening for breast cancer for income eligible women. The BCCCP provided breast screening services to over 20,000 women during the January 1993–1995 period. Unfortunately, available funding will serve only a small portion of the eligible North Carolina women.

For a referral to a local BCCCP representative, call the Cancer Information Service at 1-800-4-CANCER (1-800-422-6237).

North Carolina Cancer Control Program (CCP)

 **(919) 715-3757 or (800) 662-7030** Raleigh, North Carolina

The CCP provides financial assistance for medical care of eligible persons requiring diagnostic and treatment services. To be eligible, a person must:

- Be a resident of North Carolina.
- Have symptoms or conditions suspicious of cancer, or be diagnosed as having cancer.
- Have an estimated 25% chance or better of a 5 year survival rate once a cancer has been diagnosed.
- Be ineligible for other medical assistance programs (e.g.: Medicaid) and have limited or no health insurance. *Charges for medical expenses reimbursed by the CCP may be used to meet the Medicaid Program's "spend down" for the individual.*
- Meet the financial eligibility requirements.

For further information, contact the CCP at either of the numbers above.

Professional Education

The following organizations are available for health care providers in search of professional education materials, practice guidelines and recommendations, and educational resources for clients with special needs.

Organization	Phone Number
American Academy of Family Physicians	(816) 333-9700
American Association of Retired Persons	(703) 550-9708
American Cancer Society	(800) 227-2345
American College of Obstetricians and Gynecologists	(202) 638-5577
American College of Physicians	(215) 351-2400
American College of Radiology	(703) 648-8900
American College of Surgeons	(312) 664-4050
American Indian Health Care Association	(303) 783-9337
American Medical Association	(312) 464-5000
American Medical Women's Association	(703) 838-0500
American Nurses Association	(202) 554-4444
American Society of Radiologic Technologists	(800) 444-2778
Cancer Information Service	(800) 422-6237
Coalition of Hispanic Health and Human Service Organizations	(202) 387-5000
Food and Drug Administration	(800) 838-7715
National Black Nurse's Association	(202) 393-6870
National Black Women's Health Project	(404) 758-9590
National Health Information Center	(800) 336-4797
National Medical Association	(202) 347-1895
Native American Women's Health Education Resource Center	(605) 487-7072
North Carolina Society of Radiologic Technologists	(919) 779-5539
Office of Minority Health Resource Center	(800) 444-6472

Client Education Pages

The following three pages may be photocopied and distributed as client education materials.

The first two pages describe the breast self-examination procedure and the signs and changes which should prompt a woman to seek a professional examination. It is appropriate for all adult clients. Photocopy these two pages onto a single page, front and back.

The third page defines and describes the mammogram procedure and answers some basic questions about mammograms. It may be appropriate for clients who are considering or have been referred for a mammogram.

Space is provided for health care providers to include contact information for themselves and their practices.

Breast Self-Exam

What is the breast self-exam?

It is a simple exam that any woman can do herself to detect changes in her breasts that might indicate breast cancer. By doing the exam regularly, a woman can notice changes earlier. The sooner breast cancer is found, the easier it is to treat.

Who needs to do breast self-exams?

All women age 20 or older should do breast self-exams each month. Women age 40 or older should also have a clinical breast exam performed by a health care provider each year. Women under 40 can discuss how often they need a clinical breast exam with their health care provider.

How do I do the breast self-exam?

The exam is simple and takes only a few minutes each month. The back of this sheet contains step-by-step instructions. Your health care provider can also demonstrate it for you.

What if I find something?

If you notice any **changes** in your breast that do not go away, such as a **lump, swelling, dimpling, nipple tenderness, nipple discharge, or lasting pain**, you should contact a health care provider immediately. You can call the Cancer Information Service to find someone who can help. Their number is **1-800-4-CANCER (800-422-6237)**.

Did You Know?

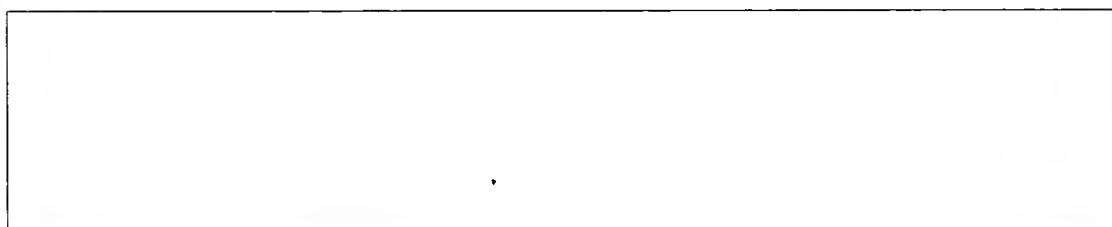
All women age 20 or older should perform a breast self-exam each month.



1 in 8 women who lives to age 85 will develop breast cancer in her lifetime.



By performing regular breast self-exams, you will be better able to notice any changes that may indicate breast cancer.



The Breast Self-Exam Step-by-Step

Check your breasts the same time each month.

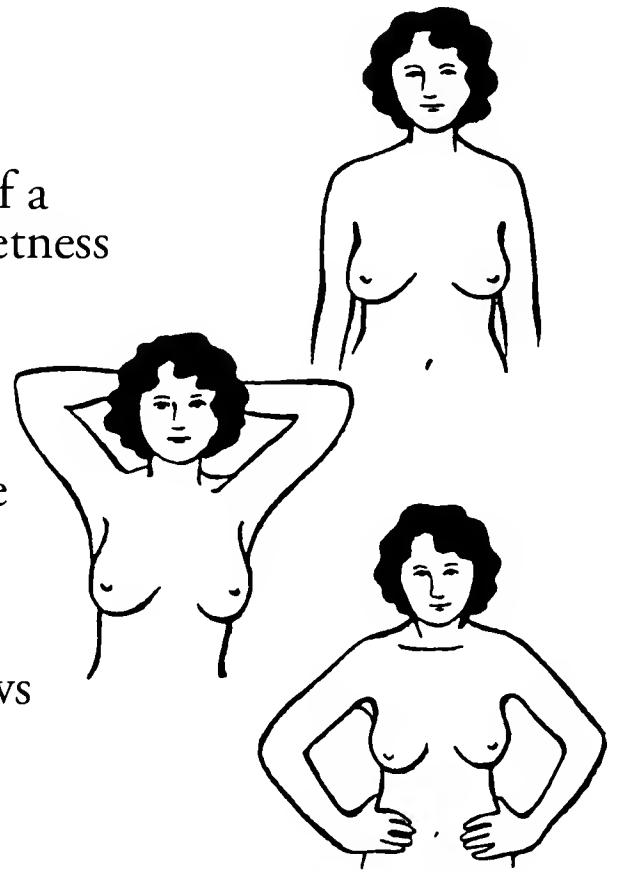
The best time is 2–3 days after your period. If you are not having periods, pick a day in the month, like the first day of the month, to examine your breasts.

1 Looking in the mirror for changes

Take off your shirt and bra and stand in front of a mirror with your arms at your side. Look for wetness from your nipples and for skin on your breasts that looks wrinkled or flaky.

Hold your hands behind your head and press your hands forward. Look for any change in the shape of your breasts.

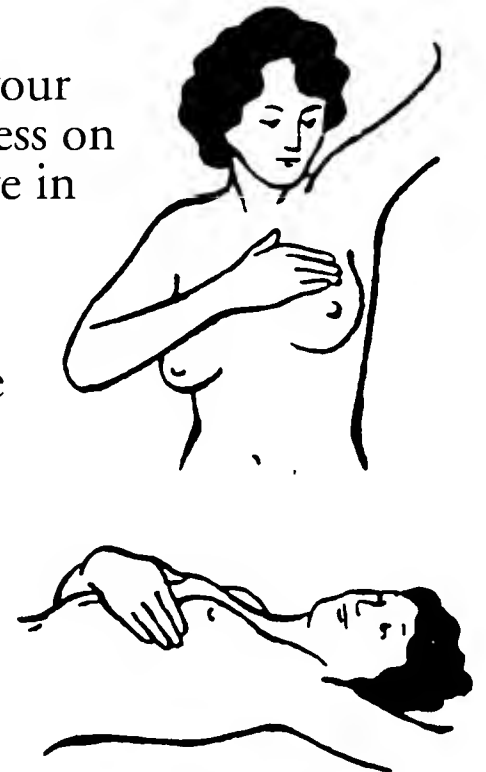
Press your hands firmly on your hips. Bend a little forward and pull your shoulders and elbows forward. Look for any changes in the shape of your breasts.



2 Feeling for lumps

Raise your left arm. Use three or four fingers to feel your breast firmly. Begin at the outer part of the breast. Press on your breast with the flat part of your fingers and move in small circles. Move around the entire breast, working toward the nipple. Be sure to feel the whole breast. Feel the area between the breast and underarm and also under your arm. Raise your right arm and do the same with the right breast and underarm.

Lie down flat on your back with your left arm over your head. Put a pillow or folded towel under your left shoulder. Feel your breast and underarm the same way you did when you were standing. Do the same with your right breast and underarm.



3 Checking for nipple discharge

Gently squeeze each nipple to see if anything comes out.



If you notice a lump, swelling, dimpling, nipple tenderness, nipple discharge, or lasting pain, contact a health care provider immediately.

What is a mammogram?

It is an x-ray picture of the breast.

Mammograms are safe and easy to perform. A woman stands in front of a special machine that takes several x-ray pictures of the breast. The x-rays are then examined by a specialist who looks for early signs of breast cancer.

Who needs a mammogram?

All women age 50 or older should have a mammogram performed every 1–2 years. Some women between the ages of 40 and 49 may also need to have a mammogram. If you are unsure, discuss with your health care provider how often you should have a mammogram.

How do I get a mammogram?

You can contact your health care provider to schedule a mammogram. Or you can call the Cancer Information Service for help. Their number is 1-800-4-CANCER (800-422-6237).

On the day of your mammogram:

- ☒ Wear a blouse and skirt or slacks instead of a dress or jumper. You will need to undress to the waist.
- ☒ Don't use deodorant, perfume, powders, or ointment on your breasts or underarms. They could cloud the x-ray.

Did You Know?

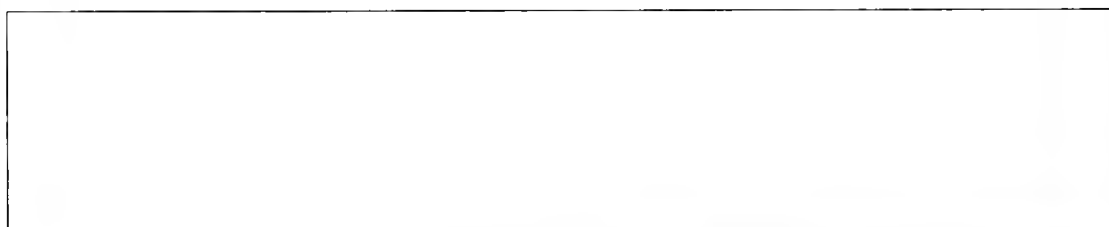
1 in 8 women who live to age 85 will develop breast cancer in her lifetime.



All women 50 years old or older should get a mammogram every 1–2 years.



A mammogram can find a lump up to 2 years before you can feel it. If it is found early, breast cancer is easier to cure.



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